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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,804	10/31/2003	Howard C. Simonson	07844-631001	2491

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EXAMINER	
BELOUSOV, ANDREY	
ART UNIT	PAPER NUMBER
2174	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/698,804	SIMONSON ET AL.	
	Examiner	Art Unit	
	Andrew Belousov	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to the original filing of October 31, 2003. Claims 1-53 are pending and have been considered below.

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because it does not identify the citizenship of each inventor.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> **The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.**

Claims 24, 43 and 53 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a method and an apparatus for representing visually a sort key order for a table of data by displaying on a graphical user interface display one or more markers with a pattern of distinct visual properties, does not reasonably provide enablement for representing visually a sort key order for a table of data by displaying on a graphical user interface display one or more markers with a pattern of distinct visual properties. The method and apparatus in these claims consist

of a single step/mean: "representing visually a sort key order for a table of data by displaying on a graphical user interface display one or more markers with a pattern of distinct visual properties", and thus is interpreted as a single means/single step claim under MPEP 2164.08(a).

"A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.). When claims depend on a recited property, a fact situation comparable to Hyatt is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor."

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-18, 20-29 and 31-53 are rejected under 35 U.S.C. 102(b) as being anticipated by Windows Explorer (bundled with Windows® XP Pro, Copyright (c) 1981-2001 Microsoft® Corporation.)

Claim 1, 32, 44: Windows discloses a computer program product tangibly embodied on an information carrier, the product comprising instructions operable to cause data processing apparatus to:

a. display a table of data (Fig. 2: 20) as an element of a graphical user interface display, display including a set of markers (Fig. 1: 8), each marker being associated with a row of the table or each marker being associated with a column of the table, the table of data having one or more sort keys (Fig. 1: 2, 4) having a sort key order (vertical sort order: ascending / descending and horizontal sort order: Name / Size Fig. 1: 2, 4) including a most significant sort key (Fig. 1: 2), each sort key being a row or a column of the table;

b. receive from the user an input gesture selecting a marker;

c. establish the row or column associated with the user-selected marker as the most significant sort key (Fig. 1: 6, Fig. 2: 22), and

d. maintain the positions of the remaining sort keys in the sort key order (Fig. 1: column 4 following column 2);

e. sort the data using the sort key order (Fig. 2: 24); and

f. display the sorted data (Fig. 2.)

Claim 2, 33: Windows discloses the product of claim 1, wherein the user input gesture is a selecting gesture for selecting the marker (Fig. 4.)

Claim 3: Windows discloses the product of claim 1, wherein the user input gesture comprises a pointing device action on the marker (Fig. 4.)

Claim 4: Windows discloses the product of claim 1, wherein the user input gesture is a mouse click on the marker (Fig. 4.)

Claim 5: Windows discloses the product of claim 1, wherein the user input gesture is a double mouse click on the marker (Fig. 4.)

Claim 6, 35, 45: Windows discloses the product of claim 1, further comprising instructions to: represent the sort key order visually in the table by displaying the markers with a pattern of distinct visual properties (triangle; Fig. 1: 6.)

Claim 7: Windows discloses the product of claim 6, wherein the pattern of distinct visual properties indicates the sort key order (triangle pointing down: descending, triangle pointing up: ascending; Fig. 1: 6.)

Claim 8: Windows discloses the product of claim 6, wherein the pattern of distinct visual properties comprises a set of distinct colors (white and light gray; Fig. 2: 20; Fig. 3: 30, 32.)

Claim 9: Windows discloses the product of claim 6, wherein the instructions to represent the sort key order visually comprise instructions to display the markers that are associated with sort keys with distinct background colors (white and light gray; Fig. 2: 20; Fig. 3: 30, 32.)

Claim 10: Windows discloses the product of claim 6, wherein the pattern of distinct visual properties comprises a set of distinct non-textual representations of the sort key order (Fig. 1: 6.)

Claim 11, 37, 47: Windows discloses the product of claim 1, further comprising instructions to: determine whether the user-selected marker is associated with the most significant key, and if so, change a sort direction of the most significant key (from descending Fig. 4: 40, to an ascending order as shown in Fig. 3: 34), and otherwise establish the row or column associated with the user-selected marker as the most significant sort key, and maintain the positions of the remaining sort keys in the sort key order (Fig. 4: Name, Size.)

Claim 12, 20, 34, 39, 49: Windows discloses the product of claim 1, wherein the user input gesture is a dragging gesture for selecting the marker by dragging the marker to an area on the graphical user interface display (Fig. 5: 50.)

Claim 13: Windows discloses the product of claim 12, wherein the area on the graphical user interface display comprises an icon (Fig. 5: 52.)

Claim 14: Windows discloses the product of claim 12, wherein the area on the graphical user interface display comprises a sort key list window (Fig. 1: 2, 4.)

Claim 15: Windows discloses the product of claim 1, wherein the number of sort keys for the table of data is limited to a predetermined number greater than one (e.g. two, Fig. 1: 2, 4.)

Claim 16, 38, 48: Windows discloses the product of claim 15, wherein the table of data has one or more sort keys having a sort key order including a most significant sort key (Fig. 1: 2) and a least significant sort key (Fig.1: 4), product further comprising instructions to: determine whether the table of data has the predetermined number of sort keys (e.g. two, Fig. 1: 2, 4.), and if so, remove the least significant sort key (Fig. 1: 4, Size) from the sort key order (by selecting Name sort key; Fig. 1: 2), establish the row or column associated with the user-selected marker as the most significant sort key (Fig. 1: 2), and maintain the positions of the remaining sort keys in the sort key order

(Fig. 4: Name, Size.), and otherwise establish the row or column associated with the user-selected marker as the most significant sort key, and maintain the positions of the remaining sort keys in the sort key order (Fig. 4: Name, Size.)

Claim 17, 36, 46: Windows discloses the product of claim 1, further comprising instructions to: receive from the user an input gesture deselecting (by selecting Size sort key; Fig. 2: 22) a marker (Fig. 1: 6) associated with a sort key (Fig. 1: 2); and remove the sort key associated with the deselected marker from the sort key order (Fig. 2: Name) while maintaining the positions of the remaining sort keys in the sort key order (Fig. 4: Name, Size.)

Claim 18: Windows discloses the product of claim 1, wherein the marker is a column header (Fig. 1: 2, 4.)

Claim 21, 40, 50: Windows discloses the product of claim 20, wherein the area of the graphical user interface display is an icon (Fig. 5: 52), the product further comprising instructions to: receive from the user an input gesture selecting the icon (Fig. 2: 22), the icon being associated with a sort key list window (Fig. 1: 8); and display, in the sort key list window on the graphical user interface display, a list of sort keys comprising the one or more sort keys for the table of data having a sort key order including the most significant sort key (Fig. 1: 2.)

Claim 22, 41, 51: Windows discloses the product of claim 20, wherein the area of the graphical user interface display is a sort key list window, the product further comprising instructions to: display, in the sort key list window (Fig. 1: 8), a list of sort keys (Fig. 1: 2, 4) comprising the one or more sort keys for the table of data having a sort key order including the most significant sort key (Fig. 1: 2.)

Claim 23, 42, 52: Windows discloses a computer program product tangibly embodied on an information carrier for interacting with a user, the product comprising instructions operable to cause data processing apparatus to:

a. display a table of data as an element of a graphical user interface display (Fig. 2: 20), display including a set of markers (Fig. 1: 8), each marker being associated with a row of the table or each marker being associated with a column of the table, the table of data having one or more sort keys (Fig. 1: 2, 4) having a sort key order (vertical sort order: ascending / descending and horizontal sort order: Name / Size Fig. 1: 2, 4) including a most significant sort key (Fig. 1: 2), each sort key being a row or a column of the table;
b. receive from the user an input gesture selecting a marker by dragging the marker to a location within an area of the graphical user interface display (Fig. 5: 50);
c. establish the row or column associated with the user-selected marker as a sort key having a position in the sort key order defined by the location within the area (Fig. 5: 50), and

d. maintain the positions of the remaining sort keys in the sort key order (Fig. 1: column 4 following column 2);

e. sort the data using the sort key order (Fig. 2: 24); and

f. display the sorted data (Fig. 2.)

Claim 24, 43, 53: Windows discloses a computer program product tangibly embodied on an information carrier for interacting with a user, the product comprising instructions operable to cause data processing apparatus to: represent visually a sort key order for a table of data by displaying on a graphical user interface display one or more markers with a pattern of distinct visual properties (Fig. 1.)

Claim 25: Windows discloses the product of claim 24, wherein the pattern of distinct visual properties indicate the sort key order (triangle pointing down: descending, triangle pointing up: ascending; Fig. 1: 6.)

Claim 26: Windows discloses the product of claim 24, wherein the pattern of distinct visual properties comprises a set of distinct colors (white and light gray; Fig. 2: 20; Fig. 3: 30, 32.)

Claim 27: Windows discloses the product of claim 24, wherein the instructions to represent the sort key order visually comprise instructions to display the markers that

are associated with sort keys with distinct background colors (white and light gray; Fig. 2: 20; Fig. 3: 30, 32.)

Claim 28: Windows discloses the product of claim 24, wherein the pattern of distinct visual properties are distinct non-textual representations of the sort key order (Fig. 1: 6.)

Claim 29: Windows discloses the product of claim 24, wherein each marker is associated with a row or each marker is associated with a column of the table of data (Fig. 1.)

Claim 31: Windows discloses the product of claim 24, wherein each marker is a column header (Fig. 1: 2.)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 19 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Windows.

Claim 19, 39: Windows discloses the product of claim 1, except wherein the marker is a row header. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the marker as a row header (as opposed to a column header as disclosed in Windows), since it has been held that rearranging parts (from column to row) of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Nielsen (6,373,504)

b. Gorman (6,738,770)

c. MS Excel (The Complete Idiot's Guide™ to MS Excel 97)

d. MS Access (See it done, Do it yourself™ EASY MS Access® 97)

e. Quattro Pro 6 (Quattro Pro 6 for Windows® for Dummies)

f. Lotus Notes 4.6 (Sam's Teach Yourself Lotus Notes® 4.6 in 24 hours)

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Belousov whose telephone number is (571) 270-1695. The examiner can normally be reached on Mon-Fri (alternate Fri off) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3800.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kristine Kincaid

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AB
June 6, 2007